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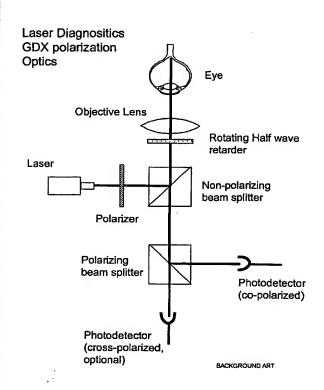
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(74) Agent: SACHAR, Surinder; Oblon, Spivak, McClelland, Maier & Neustadt, P.C., 1940 Duke Street, Alexandria, VA 22314 (US). (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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(54) Title: ADVANCED POLARIZATION IMAGING METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR RETINAL IMAGING, LIQUID CRYSTAL TESTING, ACTIVE REMOTE SENSING, AND OTHER APPLICATIONS



(57) Abstract: A method, apparatus, and computer program product for identifying features in a sample by analyzing Mueller matrices to calculate an average degree of polarization, a weighted average degree of polarization, a degree of polarization map, a degree of polarization surface. Also, a method, apparatus, and computer program product for identifying features in a sample by analyzing Mueller matrices to calculate depolarization relative to a retardance axis and/or a diattentuation axis, and to calculate aratio of diattenuation to polarizance or ratios of row and column magnitudes. Also, a method for retinal polarimetry, including a non-depolarizing light tube configured for insertion into the eye.



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